



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,899	11/21/2003	Jack C. Wybenga	2003.07.015.BN0	5313
<div>23990 7590 12/14/2007</div> <div>DOCKET CLERK</div> <div>P.O. DRAWER 800889</div> <div>DALLAS, TX 75380</div>				
<div>EXAMINER</div> <div>DOAN, KIET M</div>				
<div>ART UNIT PAPER NUMBER</div> <div>2617</div>				
<div>MAIL DATE DELIVERY MODE</div> <div>12/14/2007 PAPER</div>				

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/720,899

Applicant(s)

WYBENGA ET AL.

Examiner

Kiet Doan

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/18/2007 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Stanwood et al. (US 6,925,068) in view of Spinar et al. (US 2002/0080816 A1).

Consider claims 1, 8, 15, 20 Stanwood (US 6,925,068) teaches for use in a point-to-multipoint wireless network, a base station for transmitting downstream data packets in a downstream traffic channel to customer premises equipment (CPE) devices and receiving upstream data packets in an upstream traffic channel from said CPE devices (Abstract, C5, L22-30, C10, L1-12 teach base station communicated uplink/downlink with customer premises equipment (CPE) devices). Stanwood (US 6,925,068) teaches the limitation of claims as discuss **but silent on**

wherein said base station is capable of determining queue status of at least one queue associated with at least one application in each of said CPE devices from a link management message with a wireless media access control (MAC) layer protocol, wherein said queue status is at least one of : a queue priority and traffic type and, in response to said determination, said base station is capable of re-allocating bandwidth from a first queue associated with a first CPE device to a second queue.

In an analogous art, Spinar teaches "Method and system for adaptively obtaining bandwidth allocation requests". Further, Spinar teaches wherein said base station is capable of determining queue status of at least one queue associated with at least one application in each of said CPE devices from a link management message with a wireless media access control (MAC) layer protocol, wherein said queue status is at least one of: a queue priority and traffic type and, in response to said determination, said base station is capable of re-allocating bandwidth from a first queue associated with a first CPE device to a second queue (Paragraphs [0043], [0120-0122]).

Therefore, it would have been obvious at the time that the invention was made that person having ordinary skill in the art to modify Stanwood and Spinar such that a base station for transmitting downstream data packets and receiving upstream data packets from CPE devices and base station is capable of determining queue status wherein said queue status is at least one of: a queue priority and traffic type to provide means for setting order and efficient processing bandwidth allocating to CPE device.

Consider **claims 2, 9, 16**. Stanwood teaches the base station as set forth in

claim 1 wherein said second queue is associated with said first CPE device (C10, L23-35).

Consider **claims 3, 10**. Stanwood teaches the base station as set forth in claim 1 wherein said second queue is associated with a second CPE device separate from said first CPE device (C9, L60-67, C10, L1-35).

Consider **claims 4, 11, 17**. Stanwood teaches the base station as set forth in claim 1 wherein said base station allocates bandwidth to said second queue by transmitting a first downstream data packet, wherein said first downstream data packet comprises a Next Time Slot field capable of assigning a CPE device associated with said second queue to transmit an upstream data packet in said upstream traffic channel during a next time slot following receipt of said first downstream data packet (C7, L15-467, C8, L1-44).

4. **Claims 5-7, 12-14, 18-19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Stanwood et al. (Patent No. 6,925,068) in view of Spinar et al. (US 2002/0080816 A1) and further view of Stanwood et al. (Patent No. 6,683,866).

Consider **claims 5, 12, 18**. Stanwood (Patent No. 6,925,068) and Spinar teach the limitation of claims as discuss above **but silent on** the base station as set forth in

claim 4 wherein said Next Time slot field is part of a header of said first downstream data packet.

Stanwood (Patent No. 6,683,866) teaches " Method and apparatus for data transportation and synchronization between MAC and physical layer in wireless communication system". Further, Stanwood (Patent No. 6,683,866) teaches the base station as set forth in claim 4 wherein said Next Time slot field is part of a header of said first downstream data packet (C7, L30-63).

Therefore, it would have been obvious at the time that the invention was made that person having ordinary skill in the art to modify Stanwood (Patent No. 6,925,068) and Spinar system, such that time slot field is part of a header of said first downstream data packet to provide means for preventing lost data when transmitting large amount of data.

Consider **claims 6, 13, 19**. Stanwood (Patent No. 6,683,866) teaches the base station as set forth in claim 4 wherein said first downstream data packet comprises a payload of data directed to said first CPE device (C10, L10-67).

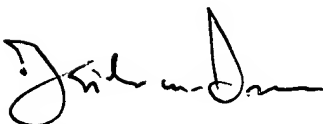
Consider **claims 7, 14**. Stanwood (Patent No. 6,683,866) teaches the base station as set forth in claim 4 wherein said first downstream data packet comprises a payload of data directed to a CPE device other than said first CPE device (C10, L10-67).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kiet Doan whose telephone number is 571-272-7863. The examiner can normally be reached on 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H. Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Kiet Doan
Patent Examiner



JOSEPH FEILD
SUPERVISORY PATENT EXAMINER